THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 15

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

> Appeal No. 1997-0202 Application No. 08/247,709¹

> > _____

ON BRIEF

Before KRASS, FLEMING and RUGGIERO, <u>Administrative Patent Judges</u>.
RUGGIERO, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 2-5, 9, 11, 12, 16, 17, 35, and 39. Claims 1, 6-8, 10, 13, 14, 27-34, 37, and 38 have been canceled. Claims 19-26 and 36 are allowed. Claims 15 and 18 have been indicated by the Examiner as containing allowable subject matter but are objected to as being dependent on a rejected claim. An amendment after

¹ Application for patent filed May 23, 1994.

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final rejection was filed February 16, 1996 but was denied entry by the Examiner.

The disclosed invention relates to a vehicle emergency warning system including a high energy, flashing strobe light mounted in the rear of the vehicle to face following traffic.

More particularly, Appellants indicate at pages 5 and 6 of the specification that different patterns of warning signals are provided dependent on particular events involving high levels of deceleration such as sudden brake application or vehicle collision.

Claim 9 is illustrative of the invention and reads as follows:

- 9. For use on a vehicle having a battery, an ignition and brakes, a vehicle emergency warning system, comprising:
 - a) a high energy visually perceptible light mounted rearwardly of said vehicle so as to face traffic following said vehicle;
 - b) a sensor mounted to said vehicle for generating an output signal proportional to g-levels experienced by said vehicle during acceleration and deceleration;
 - c) a controller having a plurality of inputs and outputs, a first one of said inputs being connected to said sensor for receiving said output signal, a second one of said inputs being connected to said brakes, and a third

one of said inputs being connected to said ignition, for:

(i) generating an enable signal on a first one of said outputs and generating a first pulse according to a first predetermined pattern on a second one of said outputs, only in the event said ignition is on, said output signal exceeds a first predetermined threshold level and said brakes are applied,

and

- (ii) generating said enable signal on said first one of said outputs and a further pulse signal according to a second predetermined pattern which is perceptively different than said first predetermined pattern on said second one of said outputs only in the event said ignition is on and said output signal exceeds a second predetermined threshold level which is greater than said first predetermined threshold level;
- d) a converter connected to said battery and said first output of said controller, for converting a 12 volt DC voltage from said battery to a suitable DC voltage in response to receiving said enable signal;
- e) a trigger connected to said converter, said light and said second output of said controller, for causing said light to flash at one of either said first predetermined pattern or said second predetermined pattern in response to receiving said high DC voltage from said converter and one of either said first pulse signal or said further pulse

signal, respectively, from said controller; and wherein said controller generates said enable signal on said first one of said outputs and said further pulse signal according to said second predetermined pattern on said second one of said outputs in the event said ignition is off and said

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output signal exceeds a third predetermined threshold level intermediate said first and second threshold levels.

The Examiner relies on the following references:

Ehrlich e	et	al.	(Ehrlich)	4,357,594	Nov.	02,	1982
Okano				5,122,954	Jun.	16,	1992
Freeman e	et	al.	(Freeman)	5,231,373	Jul.	27,	1993

Claims 2-5, 9, 17, 35, and 39 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Ehrlich. Claims 11 and 12 stand finally rejected under 35 U.S.C. § 103 as being unpatentable over Ehrlich in view of Okano. Claim 16 stands finally rejected under 35 U.S.C. § 103 as being unpatentable over Ehrlich in view of Freeman.

Rather than reiterate the arguments of Appellants and the Examiner, reference is made to the Brief and Answer for the respective details thereof.

OPINION

We have carefully considered the subject matter on appeal, the rejections advanced by the Examiner, the arguments in support of the rejections, and the evidence of obviousness relied upon by the Examiner as support for the obviousness rejection. We have, likewise, reviewed and taken into consideration, in reaching our decision, Appellants' arguments set forth in the Brief along with the Examiner's rationale in support of the rejections and

arguments in rebuttal set forth in the Examiner's Answer. It is our view, after consideration of the record before us, that the evidence relied upon and the level of skill in the particular art would not have suggested to one of ordinary skill in the art the obviousness of the invention as set forth in claims 9, 11, 12, 16, and 17. We reach the opposite conclusion with respect to claims 2-5, 35, and 39. Accordingly, we affirm-in-part.

In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (1966), and to provide a reason why one having ordinary skill in the pertinent art would have been led to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins & Refractories, Inc.,

776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert.

denied, 475 U.S. 1017 (1986); ACS Hospital Systems, Inc. v.

Montefiore Hospital, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the Examiner are an essential part of complying with the burden of presenting a prima facie case of obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

With respect to independent claim 9, Appellants' arguments (Brief, pages 14-16) focus on the alleged deficiency of Ehrlich in teaching the various operation patterns of the warning light system dependent on deceleration signals reaching a plurality of threshold levels as claimed. In the Examiner's view (Answer, page 4), Ehrlich's increasing blink rate pattern dependent on increasing deceleration signal levels would necessarily correspond to threshold levels which trigger the onset of each faster blink rate period.

After careful review of the Ehrlich reference in light of Appellants' arguments and the claimed subject matter, it is our opinion that, regardless of the merits of the Examiner's interpretation of the claimed "threshold level" language, all of the claim limitations in independent claim 9 are not met. We note that sub-paragraph e) of independent claim 9 requires the

enablement of a particular light flashing pattern dependent on the combined conditions of the ignition being off and the deceleration signal level exceeding a third threshold level intermediate the first and second threshold levels. Our reading of Ehrlich finds no teaching or suggestion of such a feature. Although the Examiner has made reference (Answer, page 18) to Ehrlich's description of a collision condition "Gee" switch at column 9, lines 1-15 which operates ". . . whenever there is an abrupt change in acceleration . . .," we find such switch operation to fall far short of meeting the requirements of subparagraph e) of claim 9.

Since all of the claim limitations of independent claim 9 are not suggested by the applied prior art, it is our opinion that the Examiner has not established a <u>prima facie</u> case of obviousness. Accordingly, we do not sustain the 35 U.S.C. § 103 rejection of independent claim 9 nor of claim 17 dependent thereon.

We now consider the rejection of dependent claims 11 and 12 under 35 U.S.C. § 103 as being unpatentable over Ehrlich in view of Okano. From the Examiner's statement of the rejection, it is apparent that Okano was applied for the sole purpose of addressing the claimed safety device activation feature which the

Examiner found lacking in Ehrlich. The Okano reference is directed to a vehicle air-bag system which is activated in the event of a collision detected by an acceleration sensor. Our review of Okano, however, reveals no disclosure that would overcome the innate deficiencies of Ehrlich and, therefore, we do not sustain the obviousness rejection of claims 11 and 12.

Turning to the obviousness rejection of independent claim 16, we note that the Examiner (Answer, page 10) seeks to modify the vehicle warning light system of Ehrlich by relying on Freeman to supply the missing teaching of activating warning lights in response to signals received from an automatic braking system (ABS). In the Examiner's view, one of ordinary skill would have been motivated to provide an ABS system which illuminates warning lights in Ehrlich to enhance vehicle safety features by augmenting the indication of vehicle deceleration.

In response, Appellants contend (Brief, page 36) that the Examiner's proposed combination of Ehrlich and Freeman is deficient since claim 16 requires not just an ABS system responsive warning light system but rather the combination of a normal operating mode of operation with ABS activation. We agree. The sequence of operation recited in claim 16 sets forth a normal mode of operation with flashing patterns associated with

first and second threshold levels combined with the overriding of the requirement to reach the first threshold level on receipt of signals from the ABS system. In our view, even assuming arguendo that the Examiner's proposed combination could be made, the resulting system would not meet the particular requirements of Claim 16. Since there is nothing in the disclosure of either Ehrlich or Freeman that would suggest the particular overriding operating sequence as claimed, we can not sustain the 35 U.S.C. § 103 rejection of claim 16.

With respect to independent claim 39, Appellants essentially reiterate their assertion that Ehrlich is deficient in disclosing the threshold level feature as claimed. While we found Appellants' arguments concerning Ehrlich to be persuasive with respect to independent claims 9 and 16 as discussed above, we reach the opposite conclusion with respect to independent claim 39. A review of claim 39 reveals a recitation of the three threshold level conditions appearing as sub-paragraphs (i)-(iii) which are similar to the recitations in claim 9 discussed previously. These sub-paragraphs are preceded, however, by qualifying language in sub-paragraph c) which recites:

. . . a controller connected to said sensor, said brakes, and said ignition, for causing said light to flash only in the event one of:

In our view, a proper interpretation of the claim construction would require only one of the conditions to be satisfied for the claim limitations to be met by the prior art. While we previously expressed doubts as to merits of the Examiner's interpretation of Ehrlich to include operation at predetermined threshold levels, it is abundantly clear that at least the first recited condition in sub-paragraph (i) of claim 39 is satisfied by Ehrlich. The warning light system described by Ehrlich would flash when the ignition is on, the brakes are applied, and deceleration exceeds a predetermined level, i.e., all that is required by the sub-paragraph (i) recitation.

As to the remaining limitations appearing in sub-paragraphs a) and b) of claim 39, the Examiner has set forth an analysis (Answer, pages 4 and 5) of how Ehrlich would be modified to arrive at the claimed invention. In our view, this analysis is sufficiently reasonable to satisfy the Examiner's burden of establishing a <u>prima facie</u> case of obviousness. After reviewing Appellants' arguments in response, we find that this <u>prima facie</u> case of obviousness has not been rebutted by any persuasive

arguments or evidence. In particular, while Appellants argue that the emergency flasher of Ehrlich is not a "high energy visually perceptible light" as claimed, the question of obviousness in implementing such a light in Ehrlich's system has not been addressed by Appellants. As to Appellants' argument that it would not be possible to energize Ehrlich's conventional flasher light to a high energy level without damage, it is our opinion that the skilled artisan, recognizing the obviousness of using a high energy light for reasons articulated by the Examiner, would not necessarily be constrained to use Ehrlich's existing light circuitry to properly implement the modification. For the reasons discussed above, the Examiner's obviousness rejection of independent claim 39 is sustained.

Further, after reviewing the language of claims 2-5 which are dependent on claim 39, we sustain the 35 U.S.C. § 103 rejection of these claims as well. We agree with the Examiner (Answer, page 22) that the determination of the blinking on-off interval discussed at column 7, lines 25-39 of Ehrlich would establish a time period in which the warning light would cease flashing as recited in claim 2. With respect to the reset feature of dependent claim 3, we find the Examiner's determination of obviousness set forth at pages 21 and 22 of the

Answer to remain unrebutted by any convincing arguments of Appellants. We note that even in Appellants' interpretation of Ehrlich (Brief, page 24), i.e., the system resets each time the ignition is turned on, the claim 3 limitations would be met. As to claims 4 and 5 we find the Examiner's reasoning that Ehrlich's rate of blinking corresponds to attainment of a predetermined threshold level convincing as well.

With respect to dependent claim 35, which is presently dependent on canceled claim 1, both Appellants and the Examiner have treated this claim as being properly dependent on claim 39². We will do so as well and also sustain the Examiner's obviousness rejection of this claim. We find the Examiner's reasoning to be convincing to the extent that the spurious signals that are desired to be eliminated by Ehrlich (column 13, lines 58-68) would obviously include such potentially signal degrading sources such as drift and component aging.

² Appellants attempted to correct the dependency of claim 35 to depend from claim 39 rather than canceled claim 1 in the amendment after final rejection filed February 16, 1996. Such amendment, however, was denied entry by the Examiner. At page 6 of the Brief, Appellants make reference to a second proposed amendment after final which presumably again attempted to correct the dependency of claim 39. This proposed amendment has not been found associated with the application file.

In conclusion, the Examiner's 35 U.S.C. § 103 rejection is sustained with respect to claims 2-5, 35, and 39, but is not sustained with respect to claims 9, 11, 12, 16, and 17.

Accordingly, the decision of the Examiner rejecting claims 2-5, 9, 11, 12, 16, 17, 35, and 39 is affirmed-in-part.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR \$ 1.136(a).

AFFIRMED-IN-PART

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